# CS 255 Business Requirements Document Template

Complete this template by replacing the bracketed text with the relevant information.

This template lays out all the different sections that you need to complete for Project One. Each section has guiding questions to prompt your thinking. These questions are meant to guide your initial responses to each area. You are encouraged to go beyond these questions using what you have learned in your readings. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead, the goal is to complete each section based on your client’s needs.

**Tip:** You should respond in a bulleted list for each section. This will make your thoughts easier to reference when you move into the design phase for Project Two. One starter bullet has been provided for you in each section, but you will need to add more.

## System Components and Design

### Purpose

*What is the purpose of this project? Who is the client and what do they want their system to be able to do?*

* Liam, the owner of DriverPass is looking to create a new system that will provide students with online courses and practices to help increase driving and practical exam scores. He is looking to have system that offers multiple packages for different levels of drivers to include coaches, driving tests, and online coaching.

### System Background

*What does DriverPass want the system to do? What is the problem they want to fix? What are the different components needed for this system?*

* The problem is that a large number of students are failing their driving tests. Additionally, Liam wants to be able to access data on the system from anywhere while the system is online or offline.

### Objectives and Goals

*What should this system be able to do when it is completed? What measurable tasks need to be included in the system design to achieve this?*

* The system should allow students to sign up for various packages of training and road help.
* DriverPass will need administrator roles in order to ensure full user account control to include accessing, updating, and deleting user profiles
* Database that has cloud-based technology in order to allow for access from various locations
* The system must be able to update packages based on availability
* The system must be allowed "access" to DMV in order to ensure practice tests are in compliance with DMV rules and regulations set by the state.

## Requirements

### Nonfunctional Requirements

*In this section, you will detail the different nonfunctional requirements for the DriverPass system. You will need to think about the different things that the system needs to function properly.*

#### Performance Requirements

*What environments (web-based, application, etc.) does this system need to run in? How fast should the system run? How often should the system be updated?*

* The system must be web based
* System performance must be quick and efficient to process various functions
* System should be consistently updated in order to ensure that students are being tested on current road rules and regulations set by DMV

#### Platform Constraints

*What platforms (Windows, Unix, etc.) should the system run on? Does the back end require any tools, such as a database, to support this application?*

* Cloud based database
* Capable of running on various operating systems including mobile

#### Accuracy and Precision

*How will you distinguish between different users?* *Is the input case-sensitive? When should the system inform the admin of a problem?*

* Input must be case sensitive
* Notify admin when user has login issues (forgot password, locked account)

#### Adaptability

*Can you make changes to the user (add/remove/modify) without changing code? How will the system adapt to platform updates? What type of access does the IT admin need?*

* Admins will have capability to make changes to user profiles as necessary.
* System should receive platform updates while DriverPass is closed prior to next business day.
* IT Admins should have access to all system aspects, but should not require access to personal user information

#### Security

*What is required for the user to log in? How can you secure the connection or the data exchange between the client and the server? What should happen to the account if there is a “brute force” hacking attempt? What happens if the user forgets their password?*

* Username and password required for login
* Possible multi-factor authentication capability
* In the event of brute force hacking attempt, account lock after specified number of tries (5).
* Ability to reset password. Reset link sent to users email on profile

### Functional Requirements

*Using the information from the scenario, think about the different functions the system needs to provide. Each of your bullets should start with “The system shall . . .” For example, one functional requirement might be, “The system shall validate user credentials when logging in.”*

* System must validate user login info and credentials
* Ability to purchase test packages
* Access online coaching videos
* Track test progress

### User Interface

*What are the needs of the interface? Who are the different users for this interface? What will each user need to be able to do through the interface? How will the user interact with the interface (mobile, browser, etc.)?*

* Different users consist of Driver(user), Instructor, and Administrator
* Users must be able to set pickup/drop-off locations for training
* Ability to see progress and next training steps
* Student/Driver photos
* Notes from instructor
* Student Special Needs
* Users will interact with the interface via mobile and web based browsers (touchscreen and mouse/keyboard)

### Assumptions

*What things were not specifically addressed in your design above? What assumptions are you making in your design about the users or the technology they have?*

* Secure network handled by third party
* Stable connection with DMV
* Certified Driving Instructors
* Knowledgeable IT Admins
* Secure database with cloud technology
* DMV Approval of system

### Limitations

*Any system you build will naturally have limitations. What limitations do you see in your system design? What limitations do you have as far as resources, time, budget, or technology?*

* Internet service provider
* Resources for various package
* Instructor Availability

### Gantt Chart

*Please include a screenshot of the GANTT chart that you created with Lucidchart. Be sure to check that it meets the plan described by the characters in the interview.*

